

DETAILED ACTION

1. Claims 13-23, 36-46, 59-96 and 103-111 are presented for examination. Claims 1-12, 24-35, 47-58 and 97-102 are canceled.

Response to Arguments

2. Applicant's arguments filed 6/30/2009 have been fully considered but they are not persuasive.
3. In the remark, applicant argued that the domain tree taught by Wilson is not the same as a network object tree as claimed.
4. Examiner traverse the argument: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., storing the sub-network designations as objects facilitates the reassignments of hosts to different sub networks by minimizing the number of modifications an administrator is required to make to implement a successful reassignment) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Wilson specifically disclosed in figure 4 and col.7, lines 23-46 that that domain are formed by a plurality of objects defining each sub-network of the domain. Hence, the domain tree is equivalent to a network object zone tree linking multiple zone objects where each node of the domain tree is an object zone comprising a plurality of objects and includes logical

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hierarchical set of network objects (see 128 object structure) each associated with a numerical sub-network designation (col.6, lines 60-65: each object is assigned a GUID in 128 bit number). Wilson disclose zone object tree (e.g. 114 or 112) and a network object tree (e.g. 128) are linked via a host object (e.g. root.com or stem.com) that is associated with domain name and the IP address (e.g. domain and IP of root.com or stem.com).

5. Because Applicants have failed to challenge any of the Examiner's "Official Notices" stated in the previous office action in a proper and reasonably manner, they are now considered as admitted prior art. See MPEP 2144.03

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-18, 36-41, 59-64, 70-71, 74, 77, 79-80, 83, 86, 88-89, 92, 95 and 103-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema, WO 99/27680, in view of Wilson, US 7,127,471.

8. Huitema and Wilson were cited in the previous office action.

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9. As per claims 13, 36 and 59, Huitema taught the invention substantially as claimed including a method of providing an IP address for a host in a computer network, the method comprising the steps of:

- a. A processor (computer is inherent to comprise processors) configured to:
receiving, from a client in a computer network, at an appliance a request for an IP address associated with a domain name (page 1, lines 19-21, 26-40, page 2, lines 5-6; receiving at local server);
- b. Retrieving the requested IP address from a database associated with the appliance (page 1, lines 28-33, page 2, lines 5-11, 20; local cache);
- c. Transmitting the retrieved IP address to the client (page 2, lines 5-8).

10. Huitema did not specifically teach to that the database is object oriented database and domain name is associated with a zone wherein:

- a. The object oriented data base comprises a zone object tree that includes a plurality of zone objects, including a first zone object associated with the zone, wherein the first zone object is linked to a second zone object associated with a sub-zone of the zone;
- b. The zone and sub-zone are associated with a logically hierarchical set of zone information;
- c. The object oriented database comprises a network object tree that includes a logically hierarchical set of network objects each associated with a numerical network designation; and

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- d. The zone object tree and the network object tree are linked via a host object that is associated with the domain name and the IP address.

11. Wilson taught to use object oriented database development to manage very large collections of information to represent the database as a collection of objects related by inheritance (col.2, lines 42-50) and a domain name hierarchy reflecting zone and associated sub-zone objects of a domain name comprising zone object tree that includes zone objects, a network object tree that includes a logically hierarchical set of network objects each associated with a numerical sub-network designation; and the zone object tree and the network object tree are linked via a host object that is associated with the domain name and the IP address (fig.4; col.6, lines 60-65, col.7, lines 23-46, 56-51). One would have been motivated to modify Huitema's database with an easier administering database similar to the object oriented database and management method taught by Wilson (see Wilson, col.1, lines 12-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema and Wilson because Wilson's teaching of domain name hierarchy using domain tree in object oriented database enables Huitema's method represent the namespaces of the domain name as a collection of objects related by inheritance.

12. As per claims 14, 37 and 60, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught the step of establishing communicative coupling between a client web browser and the appliance (page 1, lines 26-29).

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13. As per claims 15-17, 38-40 and 61-63, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught that wherein the computer network comprises the Internet, an IP based computer network and an intranet (300, fig.3, page 1, lines 19-21, page 4, lines 13-17).

14. As per claims 18, 41 and 64, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught that the appliance receives the request (fig.1, page 1, lines 28-29, page 4, lines 13-19).

15. As per claims 70, 79 and 88, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Wilson further taught that the operating system is derived from a full operating system that includes the at least one software component (col.5, lines 45-47, col.6, lines 16-27).

16. As per claims 71, 80 and 89, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Wilson further taught that the at least one software component includes one of the following: a driver or a utility software (col.12, lines 3-12).

17. As per claims 74, 83 and 92, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught that the network name-related functionality comprises the DNS and the IP address comprises a requested IP address associated

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with a host identified in a DNS request received at the appliance (page 1, lines 24-40, page 2, lines 5-14).

18. As per claims 77, 86 and 95, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught that the appliance includes a DNS server, a configuration server, a web server, a database, and/or a GUI (page 1, lines 24-40, page 2, lines 5-14).

19. As per claims 103-111, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Wilson further taught that wherein retrieving includes identifying a top level zone in the domain name and accessing a zone object associated with the sub-zone; identifying a sub-zone in the domain name and accessing a zone object associated with the sub-zone; realizing that a last term in a domain name has been reached and accessing a host object associated with the domain name (col.7, lines 23-42, col.8, lines 14-29).

20. Claims 19-23, 42-46 and 65-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema and Wilson as applied to claims 13, 36 and 59 above, and further in view of Frank et al (hereinafter Frank), US 6,832,120.

21. Frank was cited in the previous office action.

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22. As per claims 19-23, 42-46 and 65-69, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema and Wilson did not specifically teach the system to further linking a host object with a network object and a zone object, the zone object is linked to another zone object, the network object is linked to another network object, unlinking an old network object from a host object; deleting the old network object; and linking the host object to a new network object and automatically updating the host object to reflect an association with the new network object. Frank taught that custom objects can be programmed and linked together to support applications (col.2, lines 6-15) and the links can be deleted, added or reconfigured in real time (col.5, lines 54-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema, Wilson and Frank because Frank's teaching of creating custom objects and linking objects enables Huitema and Wilson's system to use custom objects to support system applications.

23. Claims 72-73, 81-82 and 90-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema and Wilson as applied to claims 13, 36 and 59 above, and further in view of "Official Notice".

24. As per claims 72-73, 81-82 and 90-91, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema and Wilson did not specifically teach the appliance excludes a hardware component/communication port that typically is included in a host computing system but that is not required to provide the network name-related functionality. Official Notice is taken that the concept and advantage of eliminating or uninstalling unused

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hardware component on a computer is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema and Wilson and further assemble a host computer with only the needed components to reduce the cost of the system and further simplify the installations.

25. Claims 75-76, 84-85 and 93-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema and Wilson as applied to claims 13, 36 and 59 above, and further in view of Boden et al (hereinafter Boden), US 6,832,322.

26. Boden was cited in the previous office action.

27. As per claims 75, 84 and 93, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema and Wilson did not specifically teach to provide an interface for configuring the appliance. Boden taught to configure a DNS server system using a graphical user interface (col.7, lines 19-35, 43-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema, Wilson and Boden because the Boden's teachings of using graphical user interface for controlling and configuring the DNS server enables Huitema and Wilson's system to access and configure the remote DNS servers to avoid redundant copies of information contained (Boden, col.7, lines 19-20).

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28. As per claims 76, 85 and 94, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema further taught to user client web browser to send request to the appliance (page 1, lines 26-29). Huitema and Wilson did not specifically teach to provide a web interface for configuring the appliance. Boden taught to configure a DNS server system using a graphical user interface (col.7, lines 19-35, 43-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema, Wilson and Boden because the Boden's teachings of using graphical user interface for controlling and configuring the DNS server enables Huitema and Wilson's system to access and configure the remote DNS servers to avoid redundant copies of information contained (Boden, col.7, lines 19-20).

29. Claims 78, 87 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema and Wilson as applied to claims 13, 36 and 59 above, and further in view of Belzile, US 6,801,952.

30. Belzile was cited in the previous office action.

31. As per claims 78, 87 and 96, Huitema and Wilson taught the invention substantially as claimed in claims 13, 36 and 59. Huitema and Wilson did not specifically teach that the database is an object oriented database. Belzile taught to store IP address in object oriented database (col.5, lines 32-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Huitema, Wilson and Belzile and use an object

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oriented database as the database disclosed in Huitema and Wilson's system to store and retrieve IP address.

Conclusion

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571) 272-6967. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

//Kenny S Lin/
Primary Examiner, Art Unit 2452
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